HR-113 Use of the Road Logger

KEY WORDS: Road Logger, density measurement, compaction, moisture content

ABSTRACT

The Lane-Wells Road Logger was utilized primarily to determine the feasibility of employing such a device for moisture and density control in Iowa highway construction. A secondary objective was the use of the Road Logger to obtain information concerning moisture content and density during and after construction.

Correlation studies with conventional test results required a small portion of the lease period. Almost all phases of construction and most materials utilized in base and surface courses were surveyed. Results of this study were good, in general, with the Road Logger indicating dry density slightly higher and the moisture content slightly lower than conventional results in most instances.

Economic feasibility seemed to pose the greatest problem for the acceptance of the Road Logger as a standard compaction control device. It would appear from the findings of this study that only large projects, or several smaller contracts tested simultaneously, could justify the expense of the Logger.

In total, about 128 miles were surveyed with the Logger during the lease period. Approximately 16 days of downtime due to minor breakdowns were recorded. Inclement weather, forcing construction delays resulted in several idle days in which the Logger's full capabilities were not realized.